## A new species of *Torynesis* Butler (Lepidoptera: Satyridae), with observations on some related

taxa

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No. 29

When describing Torynesis mintha piquetbergensis (Entomologist's Rec. J. Var., 79: 160-162 (June, 1967)) the present writer drew attention to another member of this genus which inclined towards T. mintha magna (van Son) and which had been found as close to Cape Town as the Simons Berg Mountains. Even if they are not identical with it, some of the specimens of this butterfly (especially ones in which the postdiscal bar of the forewing is nearly white), resemble what has up till recently been regarded as a smaller variation of magna from Matjesfontein; and, elsewhere in the Karroo, found by Dr J. Kaplan and Mr R. D. Stephen within recent years. Dr L. Vári has in the meantime considered magna to represent a distinct species and has treated it accordingly in his paper in Ann. Transv. Mus., 27(10): 210-211, 30th Oct., 1971\*. As the insect which is now being dealt with appears to be allopatric like all the other recognised members of the genus (at least as seems to be the case up to the present), its relative status has been difficult to assess. It is somewhat intermediate between mintha and magna though presumably closer to the former.

This butterfly is, as far as is known from observations to date, essentially a mountain insect or one which does at least seem to be restricted to fairly elevated ground and occurs at higher altitudes than those at which *mintha* is usually found. In spite of there being no records so far of the two being other than allopatric the range of the former certainly extends well into the general area frequented by the latter. The relative closeness of some of the respective habitats and the possibility of actual overlapping taking place must therefore be considered when studying the two butterflies. Since, notwithstanding this situation, each insect retains its identity (and with external differences supported by some difference in the male genitalia) it is felt that these butterflies could hardly be other than specifically distinct. The new taxon is therefore being described hereunder as a separate species.

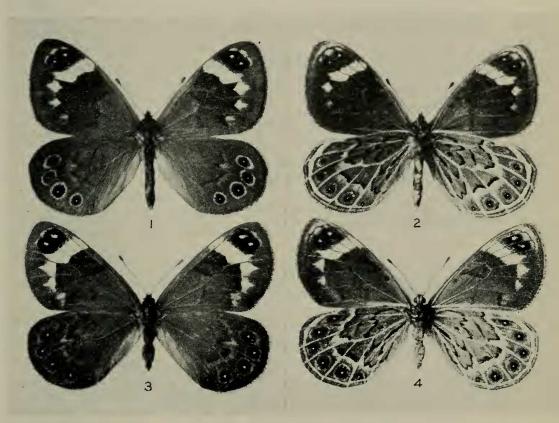
Torunesis hawenuas spec. nov.

Average size of both sexes above that of T. mintha (Geyer) but below that of T. magna (van Son).

Male. Upperside.

Forewing. Postdiscal bar inclined to be lighter than is usual in *T. mintha*. more creamy-white, and (as in holotype) frequently broader. Small upper, third pupil in black ocellate

<sup>\*</sup> This paper contains also a description of T. orangica Vári.



Torynesis hawequas spec. nov.

Fig. 1.  $\stackrel{>}{\subset}$  Holotype (upperside).

Fig. 2. ? Holotype (underside).

Fig. 3. Q Allotype (upperside).

Fig. 4. Q Allotype (underside).

Figures approximately natural size.

Photo: H. N. Wykeham.



patch only very occasionally present, but frequently so in *muntha*. The black patch itself noticeably large in some specimens.

*Hindwing*. Aparently no constant difference, in comparison with *mintha*.

Underside.

Forewing. The same differences apply as those noted for upperside, but the small upper, third pupil in black ocellate patch is not infrequently visible. The postdiscal bar may be of a deeper tint. Curved silvery-grey apical streak normally broader than in *mintha*.

Hindwing. Brown ground-colour deeper than in mintha. The black markings frequently heavier, if not invariably so. Silvery-grey scaling of veins and similarly coloured marking elsewhere on wing with a rather purplish tone and not as light as in mintha and, apart from the continuous, narrow submarginal stripe, contrasting less strongly with the dark background. Golden-yellow rings encircling black submarginal ocelli not as well developed as is usual in mintha, and in some paratypes virtually absent.

Length of forewing: 26.5-30 mm. (27 mm., in holotype). An abnormally small specimen has a forewing measurement of

only 25 mm.

Female. Upperside.

Forewing. Postdiscal bar usually with a deeper yellow tinge than in male. (In the male holotype and female allotype it is of the same tone in each case).

Hindwing. Very much as in male; the rings of the ocelli

sometimes enlarged in individual specimens.

Underside.

Very similar to that of male.

Forewing. Reddish-brown colouring extending from wing-base, frequently rather more prominent and extensive than in male.

*Hindwing*. Ground-colour inclined to be less deep in tone in type-series as a whole, but not so in female allotype, in comparison with male holotype.

Length of forewing: 28-33 mm. (the former measurement,

that of allotype).

In both sexes the hair and scales of the body and ancillary parts are, in general, darker in this insect than in *T. mintha*.

d Holotype, WESTERN CAPE PROVINCE: Middenkrantz Berg, Fransch Hoek Mtns., 19.iv.1972 (C.G.C.D.); British Museum Reg. Uo. Rh. 17322.

Q Allotype, W. CAPE PROVINCE: Fransch Hoek Mtns. (N. of top of Pass), 18.iv.1972 (C.G.C.D.); British Museum Reg. No.

Rh. 17323.

Paratypes in Coll. British Museum: data as holotype, 13; as allotype, 14.iv.1972, 299 (C.G.C.D.).

Paratypes in author's collection: as allotype, 2.iv.1946,  $3 \circlearrowleft \circlearrowleft$ , 14.iv.1972,  $1 \circlearrowleft$ ,  $3 \circlearrowleft \circlearrowleft$ ; as holotype, 18.iv.1972,  $2 \circlearrowleft \circlearrowleft$ ,  $1 \circlearrowleft$ , 19.iv.

1972,  $2 \circlearrowleft \circlearrowleft$ ; Hawequas Mtns., 8.iii.1937,  $1 \circlearrowleft$  (C.G.C.D.); Simons Berg, 26.iv.1937,  $1 \circlearrowleft$  (C.G.C.D.).

Paratypes in Coll. Transvaal Museum, as holotype, 19.iv.

1972, 1♂, 1♀ (C.G.C.D.).

Paratypes in Coll. National Museum of Rhodesia, Salisbury: as holotype, 19.iv.1972, 1♂, 18.iv.1972, 1♀ (C.G.C.D.).

Paratypes in Coll. A. J. Duke (presented to C.G.C.D.): Du

Toit's Kloof, 9.iv.1950, 4♂♂, 1♀ (A.J.D.).

Paratypes in Coll. C. W. Wykeham: Simons Berg, 27.iv.1962,

6♂♂, 1♀ (C.W.W.).

As in *T. mintha*, both sexes show much variation in the development or otherwise of the upperside deep brownish- to orange-red colouring on the inner side of the black discal marking in the forewing and on its outer side in the hindwing—and which may occur elsewhere also. This is well developed in the male holotype and in the female allotype it is very conspicuous in all wings. In the former specimen the prominent rings encircling the black submarginal ocelli of the hindwing are golden-yellow and, in the latter, rich brownish-red. There is a general tendency in both sexes for the golden-yellow marking bounding outwardly the black ocellate patch in the forewing to extend less far outwards than in *mintha*.

Apart from its smaller average size, T. hawequas differs from T. magna in rarely having the postdiscal bar of the forewing upperside quite as white or whitish or the other markings (when present) as lightly coloured in any of the wings; the light marking bounding outwardly the black ocellate patch of the forewing is also decidedly narrower than in magna, while the black cross-streak in the cell of the forewing is closer to the end of the cell. The same remarks concerning the light marking apply to the underside, these being less prominent and extensive, especially those adjoining the black subapical patch of the forewing, than in magna, in which they are particularly well developed in the female. The narrow silvery apical marking of the forewing does not continue as far downwards, and the ground-colour of the hindwing is a little darker than in magna with the dark markings generally less heavy and the silvery markings as a whole, including the edging to the costa, less light and prominent. It is now believed that the Matjesfontein insect referred to at the beginning of this article is distinct from true magna and requires further investigation.

In comparison with those of *T. mintha* from and close to the Cape Peninsula, the male genitalia of *T. hawequas* show certain differences, which are not, however, always very consistent individually, if a sufficient number of preparations of each taxon are used for this purpose. These include some difference in the shape of the lower sclerotized process of the membrane which extends down from the *gnathos*; the more elongate form of *valve* in *hawequas*; the larger size of the spine at the distal end of the *aedeagus* and the apparent absence of any definite, minute spine below this spine; and the